

EAST Search History

| Ref # | Hits | Search Query | DBs | Default Operator | Plurals | Time Stamp |
|-------|---------|--------------------------|---|------------------|---------|------------------|
| L1 | 311 | (562/535).CCLS. | US-PGPUB; USPAT; EPO; JPO; DERWENT | OR | OFF | 2006/08/22 06:09 |
| L2 | 822549 | zone | US-PGPUB; USPAT; EPO; JPO; DERWENT | OR | ON | 2006/08/22 06:10 |
| L3 | 82 | l1 and l2 | US-PGPUB; USPAT; EPO; JPO; DERWENT | OR | ON | 2006/08/22 06:10 |
| L4 | 1081442 | activity | US-PGPUB; USPAT; EPO; JPO; DERWENT | OR | ON | 2006/08/22 06:10 |
| L5 | 62 | l3 and l4 | US-PGPUB; USPAT; EPO; JPO; DERWENT | OR | ON | 2006/08/22 06:11 |
| L6 | 859544 | oxygen | US-PGPUB; USPAT; EPO; JPO; DERWENT | OR | ON | 2006/08/22 06:11 |
| L7 | 62 | l5 and l6 | US-PGPUB; USPAT; EPO; JPO; DERWENT | OR | ON | 2006/08/22 06:12 |
| L8 | 568111 | Molybdenum or Mo | US-PGPUB; USPAT; EPO; JPO; DERWENT | OR | ON | 2006/08/22 08:33 |
| L9 | 58 | l7 and l8 | US-PGPUB; USPAT; EPO; JPO; DERWENT | OR | ON | 2006/08/22 06:13 |
| L10 | 77 | volume specific activity | US-PGPUB; USPAT; EPO; JPO; DERWENT | ADJ | ON | 2006/08/22 06:13 |
| L11 | 6 | l5 and l10 | US-PGPUB; USPAT; EPO; JPO; DERWENT | ADJ | ON | 2006/08/22 06:17 |

EAST Search History

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|-----|-------|---------------|---|-----|----|------------------|
| L12 | 50 | "2830765" | US-PGPUB; USPAT; EPO; JPO; DERWENT | ADJ | ON | 2006/08/22 06:24 |
| L13 | 11 | "6403829" | US-PGPUB; USPAT; EPO; JPO; DERWENT | ADJ | ON | 2006/08/22 08:13 |
| L14 | 2 | "20040242926" | US-PGPUB; USPAT; EPO; JPO; DERWENT | ADJ | ON | 2006/08/22 06:57 |
| L15 | 2 | "20040192965" | US-PGPUB; USPAT; EPO; JPO; DERWENT | ADJ | ON | 2006/08/22 07:00 |
| L16 | 3 | "20040225158" | US-PGPUB; USPAT; EPO; JPO; DERWENT | ADJ | ON | 2006/08/22 07:02 |
| L17 | 5 | "2004019264" | US-PGPUB; USPAT; EPO; JPO; DERWENT | ADJ | ON | 2006/08/22 07:02 |
| L18 | 2 | "20040192964" | US-PGPUB; USPAT; EPO; JPO; DERWENT | ADJ | ON | 2006/08/22 07:04 |
| L19 | 3 | "20040192963" | US-PGPUB; USPAT; EPO; JPO; DERWENT | ADJ | ON | 2006/08/22 07:19 |
| L20 | 16 | "1055662" | US-PGPUB; USPAT; EPO; JPO; DERWENT | ADJ | ON | 2006/08/22 07:33 |
| L21 | 11769 | "19910508" | US-PGPUB; USPAT; EPO; JPO; DERWENT | ADJ | ON | 2006/08/22 07:34 |
| L22 | 202 | unverricht | US-PGPUB; USPAT; EPO; JPO; DERWENT | ADJ | ON | 2006/08/22 07:34 |
| L23 | 6 | l21 and l22 | US-PGPUB; USPAT; EPO; JPO; DERWENT | ADJ | ON | 2006/08/22 07:51 |

EAST Search History

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|-----|---------|---|---|-----|----|------------------|
| L24 | 5 | "6620968" | US-PGPUB; USPAT; EPO; JPO; DERWENT | ADJ | ON | 2006/08/22 07:55 |
| L25 | 84483 | decrease near4 temperature | US-PGPUB; USPAT; EPO; JPO; DERWENT | ADJ | ON | 2006/08/22 07:56 |
| L26 | 6 | I5 and I25 | US-PGPUB; USPAT; EPO; JPO; DERWENT | ADJ | ON | 2006/08/22 08:00 |
| L27 | 6 | I1 and I26 | US-PGPUB; USPAT; EPO; JPO; DERWENT | ADJ | ON | 2006/08/22 08:01 |
| L28 | 0 | I27 not I26 | US-PGPUB; USPAT; EPO; JPO; DERWENT | ADJ | ON | 2006/08/22 08:01 |
| L29 | 2 | "6403829".pn. | US-PGPUB; USPAT; EPO; JPO; DERWENT | ADJ | ON | 2006/08/22 08:15 |
| L30 | 2 | "6563000".pn. | US-PGPUB; USPAT; EPO; JPO; DERWENT | ADJ | ON | 2006/08/22 08:15 |
| L31 | 2716181 | vanadium or V | US-PGPUB; USPAT; EPO; JPO; DERWENT | OR | ON | 2006/08/22 08:32 |
| L32 | 55 | ((Molybdenum or Mo) and (vanadium or V) and (volume specific activity) and acrolein and acrylic).clm. | US-PGPUB; USPAT; EPO; JPO; DERWENT | OR | ON | 2006/08/22 08:35 |
| L33 | 25 | ((Molybdenum or Mo) and (vanadium or V) and (volume specific activity) and acrolein and acrylic).clm. | US-PGPUB | OR | ON | 2006/08/22 09:35 |
| L34 | 1 | "0053559" | US-PGPUB | OR | ON | 2006/08/22 09:36 |

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=> file caplus

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SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

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0.21

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```
=> volume specificactivity
    104916 VOLUME
    15743 VOLUMES
    114043 VOLUME
        (VOLUME OR VOLUMES)
    707015 VOL
    86942 VOLS
    759978 VOL
        (VOL OR VOLS)
    818633 VOLUME
        (VOLUME OR VOL)
    0 SPECIFICACTIVITY
L1    0 VOLUME SPECIFICACTIVITY
        (VOLUME (W) SPECIFICACTIVITY)
```

```
=> volume specific activity
    104916 VOLUME
    15743 VOLUMES
    114043 VOLUME
        (VOLUME OR VOLUMES)
    707015 VOL
    86942 VOLS
    759978 VOL
        (VOL OR VOLS)
    818633 VOLUME
        (VOLUME OR VOL)
    1354052 SPECIFIC
    1440 SPECIFICS
    1355337 SPECIFIC
        (SPECIFIC OR SPECIFICS)
    288280 SP
    7561 SPS
    295472 SP
        (SP OR SPS)
    1613150 SPECIFIC
        (SPECIFIC OR SP)
    2147700 ACTIVITY
    424481 ACTIVITIES
    2324943 ACTIVITY
        (ACTIVITY OR ACTIVITIES)
L2    11 VOLUME SPECIFIC ACTIVITY
        (VOLUME (W) SPECIFIC (W) ACTIVITY)
```

=> d l2 1-11 ti

L2 ANSWER 1 OF 11 CAPLUS COPYRIGHT 2006 ACS on STN
TI Concentration of radon-222 in the air of dwellings

L2 ANSWER 2 OF 11 CAPLUS COPYRIGHT 2006 ACS on STN
TI Leaching or size separation for soil decontamination

L2 ANSWER 3 OF 11 CAPLUS COPYRIGHT 2006 ACS on STN
TI High activity hot particles in Kozloduy Nuclear Power Plant -- status of the investigations

L2 ANSWER 4 OF 11 CAPLUS COPYRIGHT 2006 ACS on STN
TI Spectrometry and visualization of 'standard' hot particles from the Chernobyl accident

L2 ANSWER 5 OF 11 CAPLUS COPYRIGHT 2006 ACS on STN
TI Application of (methyl-11C)-methionine in the multicellular spheroid system

L2 ANSWER 6 OF 11 CAPLUS COPYRIGHT 2006 ACS on STN
TI Biosensors for detection of enzymes immobilized in microvolume reaction chambers

L2 ANSWER 7 OF 11 CAPLUS COPYRIGHT 2006 ACS on STN
TI Milk-coagulating protease manufactured by Streptomyces hygroscopicus

L2 ANSWER 8 OF 11 CAPLUS COPYRIGHT 2006 ACS on STN
TI Production of α -glycerol-3-phosphate oxidase with Propionibacterium for use in glyceride and/or glycerol determination

L2 ANSWER 9 OF 11 CAPLUS COPYRIGHT 2006 ACS on STN
TI Cask for ultimate storage of radioactive wastes

L2 ANSWER 10 OF 11 CAPLUS COPYRIGHT 2006 ACS on STN
TI Guide for the hazards evaluation of a cheminuclear installation

L2 ANSWER 11 OF 11 CAPLUS COPYRIGHT 2006 ACS on STN
TI Problems of intralymphovascular introduction of radioactive colloidal solutions

=> acrolein

16342 ACROLEIN
506 ACROLEINS
L3 16498 ACROLEIN
(ACROLEIN OR ACROLEINS)

=> acrylic

264778 ACRYLIC
1342 ACRYLICS
L4 265157 ACRYLIC
(ACRYLIC OR ACRYLICS)

=> molybdenum or Mo

227205 MOLYBDENUM
34 MOLYBDENUMS
227209 MOLYBDENUM
(MOLYBDENUM OR MOLYBDENUMS)
490101 MO
51114 MOS
538162 MO
(MO OR MOS)
L5 632433 MOLYBDENUM OR MO

=> Vandium or V
47 VANDIUM
1078834 V
L6 1078847 VANDIUM OR V

=> l3 and l4
L7 2327 L3 AND L4

=> l7 and l5
L8 817 L7 AND L5

=> l8 and l6
L9 283 L8 AND L6

=> temperature (l) decrease
577847 TEMPERATURE
77284 TEMPERATURES
644572 TEMPERATURE
(TEMPERATURE OR TEMPERATURES)
2955696 TEMP
754619 TEMPS
3285612 TEMP
(TEMP OR TEMPS)
3419102 TEMPERATURE
(TEMPERATURE OR TEMP)
882637 DECREASE
381861 DECREASES
1194067 DECREASE
(DECREASE OR DECREASES)
L10 250434 TEMPERATURE (L) DECREASE

=> l9 and l10
L11 1 L9 AND L10

=> d l11 ti fbib abs

L11 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2006 ACS on STN
TI Partial oxidation of propene in the presence of steam
AN 1994:31256 CAPLUS
DN 120:31256
TI Partial oxidation of propene in the presence of steam
AU Saleh-Alhamed, Y. A.; Hudgins, R. R.; Silveston, P. L.
CS Chem. Eng. Dep., King Abdulaziz Univ., Jeddah, Saudi Arabia
SO Studies in Surface Science and Catalysis (1993), 75 (New Frontiers in
Catalysis, Pt. C), 2019-22
CODEN: SSCTDM; ISSN: 0167-2991
DT Journal
LA English
AB Addition of steam in the partial oxidation of propene improves selectivity and is frequently mentioned in the patent literature. The effect of steam on partial oxidation kinetics or on the mechanism through which steam alters selectivity is addressed employing results from steady-state and step-change measurements of rates of product formation, isotopic transient measurements, and temperature-programmed desorption studies. Two catalysts were investigated: a Sb/Sn/V oxide, described in the literature as a capable of forming acrylic acid (I), and a Bi/Mo oxide that does not form the acid. For the Bi/Mo oxide, steam addition reduces the rates of product formation, but does not affect selectivity markedly and leaves the reaction order with respect to reactants unchanged. The role of water is to block reaction sites by competitive adsorption on these sites. The effect of steam addition on the Sb/Sn/V oxide is complicated. Low levels of steam (<2%) sharply alter selectivity by suppressing total oxidation and increasing acrolein (II) and I formation rates. Total oxidation products arise solely from a C-C bond scission side-reaction which produces MeCHO and

AcOH. Steam levels >5% decrease product formation. Step-change data indicate total oxidation of propene or partial oxidation of products must occur and that I must form through II. Use of an 18O isotope indicated O exchange between steam and the catalyst and suggested rapid formation of weakly adsorbed II on the surface. The Sb/Sn/V oxide as a source of O for II formation was indicated. TPD measurements suggested both weak and strong adsorption sites participate in the partial oxidation reactions. II was associated with the former, while propene and oxygenates were found on the latter sites. I and AcOH acid are strongly adsorbed. These results are consistent with partial oxidation occurring on both weakly and strongly adsorbing surface sites. II appears to be produced mainly on the former; C-C bond scission and total oxidation occurs primarily on the latter. I is formed on these sites as well but via II. The role of steam seems to be selectively block the strongly adsorbing sites and enhance reoxidn. of the catalyst surface.

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 COST IN U.S. DOLLARS

| SINCE FILE | TOTAL |
|------------|---------|
| ENTRY | SESSION |
| 35.40 | 35.61 |

FULL ESTIMATED COST

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

| SINCE FILE | TOTAL |
|------------|---------|
| ENTRY | SESSION |
| -0.75 | -0.75 |

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